CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY

ORDER NO. 96-106
NPDES PERMIT NO. CA0038733

AMENDING WASTE DISCHARGE REQUIREMENTS FOR

UNION SANITARY DISTRICT
OLD ALAMEDA CREEK INTERMITTENT WET WEATHER DISCHARGE
UNION CITY, ALAMEDA COUNTY

California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board), finds that:

1. On March 15, 1995, the Board adopted waste discharge requirements for the Union Sanitary District (USD), hereinafter the discharger, to discharge wastewater to the waters of the State and the United States under the National Pollutant Discharge Elimination System (NPDES) in Order No. 95-053.

2. Under present contractual agreements, USD currently discharges treated wastewater (42.9 million gallons per day contractual maximum) into the East Bay Dischargers Authority (EBDA) transport pipeline. EBDA is a Joint Exercise of Powers Agency (JEPA), the members of which separately own and operate collection and treatment facilities for domestic, commercial, and industrial wastewater. By contractual agreement, EBDA transports treated wastewater from its member agencies to its dechlorination station near the San Leandro Marina (Marina Dechlorination Facility) and thence to its deepwater outfall in Lower San Francisco Bay west of the Oakland Airport at longitude 122° 17' 42" W, latitude 37° 41' 40" N. The outfall's diffuser is located 37,000 feet from shore; it discharges 23.5 feet below the surface (MLLW); and it is designed to provide minimum initial dilution of greater than 10:1 at all times, and about 45:1 for 45% of the time. EBDA's combined discharge is governed by NPDES permit No. CA0037869 (Order Nos. 94-072 and 96-105).

3. During the period from 1994 through 2000, the discharger proposes a peak wet weather flows (PWWF) discharge up to approximately 5.1 million gallons (MG) of secondary treated and disinfected wastewater for a duration of approximately 10 hours during the 20-year wet weather event. Larger storms are expected to produce higher PWWF discharge volume. The discharge would occur via an existing outfall structure to the tidal portion of Old Alameda Creek at Latitude 37° 35' 40"., and Longitude 122° 5' 26". Old Alameda Creek is operated as a flood control channel by Alameda County Flood Control and Water Conservation District and flows to Lower San Francisco Bay where dilution of greater than 10:1 is expected.

4. From July 1994 through June 1995, the discharger and other EBDA member agencies studied the effect of reduced chlorine residual on fecal coliform numbers in the effluent and receiving waters. The information contained in their report, "Justification for Fecal Coliform Effluent Limitation," indicated that there are no negative impacts on the receiving

waters due to the reduction of chlorine residual and subsequent increase in the fecal coliform numbers in the effluent. The report concluded that the receiving waters in the vicinity of the EBDA outfall are not used for water-contact recreation and that the five day log mean fecal coliform density up to 500 MPN/100 ml, and 90th percentile fecal coliform value of up to 1100 MPN/100 ml in the effluent will be protective of the beneficial uses of the receiving waters. Receiving water monitoring data showed that the fecal coliform density in receiving water was generally less than 2.0 MPN/100ml when the effluent was discharged with a fecal coliform density of 500 MPN/100 ml. Therefore, the discharger and other EBDA member agencies have requested a revision of the effluent limitation for coliform bacteria in their NPDES permit to reflect this situation.

In 1990, the California Department of Health Services (DHS) provided clarification of beneficial use definitions of waters of the State as related to bacteriological standards. DHS recommended median fecal coliform densities of 500 MPN/100 ml, and 90th percentile fecal coliform value of up to 1100 MPN/100 ml as a criterion for limited water contact recreation. However, the receiving water monitoring data show that these densities in the effluent are protective of water contact recreation uses in the receiving waters.

5. Above mentioned report provides new information not available at the time the permit was issued which justifies application of a different coliform limit. This new information demonstrates that the proposed effluent limit will not result in a violation of water quality standards. Therefore, this proposed effluent limit does not violate the backsliding provision of sections 402(o)(1)-(3) and 303(d)(4) of the Clean Water Act.

6. The waste discharge requirements (NPDES permit) for EBDA and its member agencies will be amended with this Order. The amended waste discharge requirements will include revised effluent limit for coliform bacteria. Since the discharger will operate its wastewater treatment plant at a reduced chlorine dosage after this amendment, it cannot reliably meet the effluent limitation for coliform bacteria included in their existing NPDES permit. The discharger has documented in the "Evaluation of Proposed Peak Wet Weather Flow Discharge to Old Alameda Creek" report that the ambient total and fecal coliform densities in the Old Alameda Creek are typically greater than the revised effluent limit for coliform bacteria. Thus, the revised limit will not degrade the quality of the receiving waters.

7. The amendment of an NPDES permit is exempt from the provisions of Chapter 3 (commencing with Section 2100 of Division 13) of the Public Resources Code (CEQA) pursuant to Section 13389 of the Water Code.

8. The dischargers and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided an opportunity to submit their written views and recommendations.

9. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that:

A. Section B.3. under "EFFLUENT LIMITATIONS" of Order No. 95-053 shall be amended to read as follows:

Fecal Coliform Bacteria:

The treated wastewater, at some place in the treatment process prior to discharge, shall meet the following limits of bacteriological quality: The five day log mean fecal coliform density shall not exceed 500 MPN/100 ml, and the ninetieth percentile value shall not exceed 1100 MPN/100 ml.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 17, 1996.

LORETTA K. BARSAMIAN
Executive Officer